



**ENVIRONMENT AND CONSERVATION ORGANISATIONS of NZ Inc.**  
Level 2, 126 Vivian St, Wellington, New Zealand  
PO Box 11-057, Wellington  
Phone/Fax 64-4-385-7545  
Email: [eco@eco.org.nz](mailto:eco@eco.org.nz)

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Local Government and Environment Select Committee  
Committee Secretariat  
Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill  
Parliament Buildings  
Wellington

Phone: +64 4 817 9485  
Fax: +64 4 499 0486

## **Submission on Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill – Revised and Updated.**

### **1.0 INTRODUCTION**

The Environment and Conservation Organisations of NZ (ECO) is the national alliance of 55 groups with a concern for the environment. We welcome the introduction of this bill and this opportunity to make a submission on the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill. ECO has been involved in issues of resource management and land-use policy since its formation nearly 40 years ago.

This submission has been prepared by members of ECO Executive, is in line with ECO Policy. We held the *SeaViews* conference in 1998 which developed a good deal of thinking about the issue of environmental management in the EEZ and Continental Shelf and we have been involved a number of policy development processes relating to this topic since then.

ECO is very glad to see legislation finally emerge, and we believe this is just a step towards a more coherent overarching oceans environmental protection and management regime that is still to be developed. We understand that this Bill is designed to be a gap filler, but can see some problems with the Bill as it has emerged and would like to suggest some improvements.

ECO wishes to be heard in support of this submission. Please contact both the ECO office at [eco@eco.org.nz](mailto:eco@eco.org.nz) on 04-385-7545 and Cath Wallace on 021-891-994 and [Cath.Wallace@paradise.net.nz](mailto:Cath.Wallace@paradise.net.nz). Cath Wallace wishes to be heard via telephone

submission on 07-866-3760. Co-chair Barry Weeber has a conflict and may be present in Wellington but may not.

## **ECO Submissions on Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill**

### **2.0 Submissions**

ECO welcomes the introduction of this Bill which has been a long time coming and is sorely needed, but we argue, is not sufficient, is inconsistent with the international law that establishes the duties and rights of New Zealand in respect of the extended continental shelf and the EEZ. We also submit that the purpose of the Bill and the matters to be considered provide insufficient ranking or other indications of priorities and hence guidance for decision makers. In parts the Bill needs some significant re-writing.

We welcome the introduction of a legal regime with environmental considerations for the area of NZ responsibility in the EEZ and Continental Shelf, a consenting regime, and the provision for spatial management but we consider this needs further development and should be accompanied by the passage of an updated and expanded Marine Reserves Act that implements conservation and other grounds for the establishment of no-take areas and provides the legal authority for such in the EEZ and over the Continental Shelf.

#### **The structure of these Submissions**

To aid the Committee, we have ordered these submissions in the order of the clauses of the Bill. In some places we will take a group of clauses together.

#### **Key Points**

- 1     The **Purpose** of the Bill (cl 10) is problematic in that it gives no guidance to decision makers on how to order and rank priorities and conflicts between the protection of the environment and between the various competing activities and values.
- 2     The term “balance” is unhelpful and will generate uncertainty for all, particularly in combination with cl 12 which provides a list of competing considerations and no guidance on how to order and prioritise these.

## **Clause by Clause Discussion**

### **Clause 4 Interpretation:**

ECO considers a number of the definitions in clause 4 Interpretation need further work.

**Disturb** needs further elements. This definition should include amongst other things:

- The use of “suction” or vacuuming activities;
- Dumping;
- Damage or disruption of habitat;
- The introduction of alien species;
- Damage to or removal of animals or plants;
- Changing the temperature of the sea;
- Changing the chemistry of the environment;
- Altering the hydrology of the marine environment.

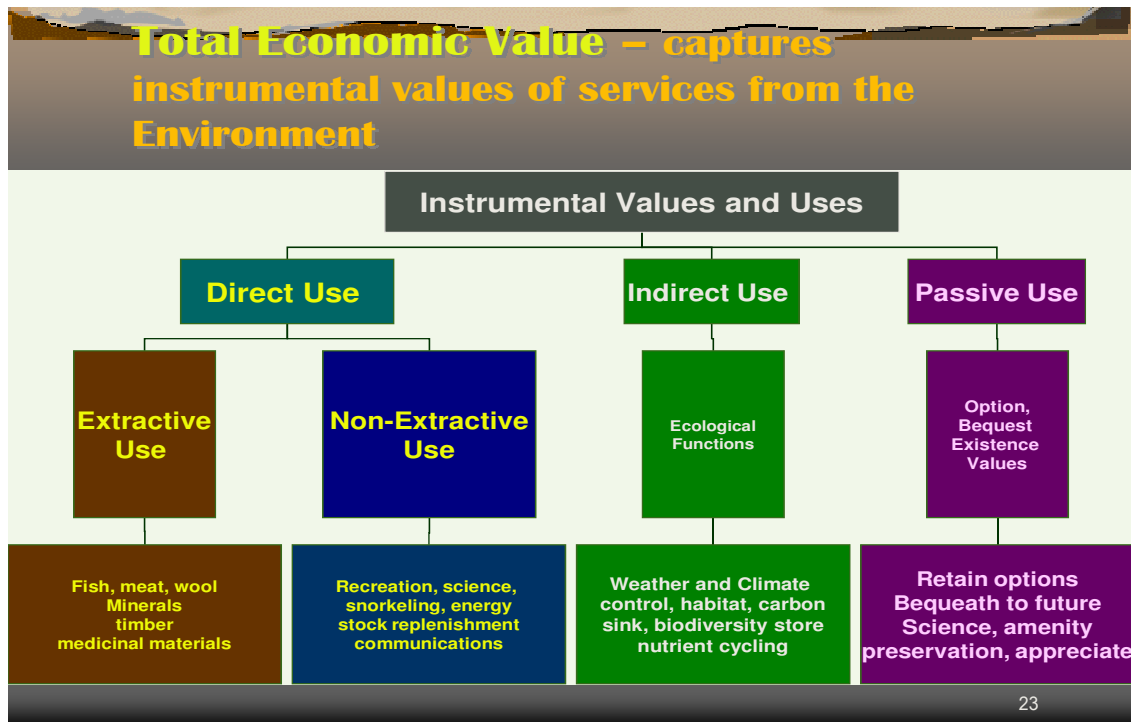
**Existing interest** should include protection of non-extractive and non-economic values as well as specific consents and financial interests such as Treaty Settlements.

The “existing interest” language seems to take us back to the days of the Town and Country Planning Act where non-financial or ownership interests were not recognised. Since the environment provides many non-rival and non-excludable benefits of the utmost importance to humans, it is essential that this language and definition is changed to protect common and non-rival benefits, ie those that provide benefits to several or all simultaneously.

Benefits including services and commodities from the environment, which is a set of interacting systems, can be recognised as falling within the following categories:

- “resources” which may be unconditionally renewable, conditionally renewable and non-renewable (within human time frames), so the rate of use or impacts are vital considerations.
- Amenity values – directly experienced – eg views, warmth, wonderment at natural variety colour and form,
- Ecosystem functions and life support
- Waste and pollution absorption and transformation services.
- Biogeochemical processes.

The following diagram shows the array of services from the environment. This applies to both terrestrial and marine but the principals are the same. Benefits vary as to whether they are brokered to people through markets, but they are all valuable and together constitute “total economic value”.



Goods or Services from the environment may be rival or non-rival in the way we use or experience them. Whether any particular benefit from something are rival or non-rival (or both) depends both on what it is and how we derive benefit from it.

Just to explain, the definitions of these terms are these.

**Rival:**

- One person's use means someone else can't use or benefit from it:
- Eg, eating a fish; using a mineral in manufacturing or in agriculture.

**Non-rival**

- One person's use does not diminish the benefits to others. The benefits are available for all simultaneously:
- Eg: Life support systems, biodiversity, climate and temperature regulation, biodiversity, habitat, flood protection from a swamp, seeing a view, watching a fish, pollution absorption.

A problem for policy is that many of the most vital services from the environment are non-rival benefits that are not allocated by the market, are unpriced or poorly priced, and thus need to be allocated or protected by policy processes. This is the challenge for the EEZ and CS(EE) Bill. The attempt to give priority to existing interests and activities is misguided, since these may often be the least important of the services and benefits from the environment – which is not to dismiss them as unimportant.

ECO considers that the common and non-rival interests in the environment should be given more weight than the rival benefits which are typically the “resources”.

This means that the guaranteeing of particular existing interests should be moderated by the overwhelming responsibility to maintain the environment in a healthy

functioning condition and the recognition of the interests in the non-rival and/or non-market services and benefits from the environment. One way of thinking about this is to require that the underpinning natural capital and systems are not damaged or depleted and only subject to this to allow existing interests to be preserved but to expand the definition of existing interests to include the non-rival benefits.

Our recommended approach is in fact that in international law, particularly, but not only UNCLOS, which makes the right to exploit resources (Art 193) explicitly subject to the unqualified obligations on states to preserve and protect the marine environment (Art 192).

**Biophysical** systems should be included and protected, so that the idea of the natural systems that provide ecosystem services and resources is established. This includes climate, geophysical processes and biological systems that interact with these.

The definition of the **environment** should include **biophysical systems**.

We are continuing to study these definitions.

#### ***Clause 6 Meaning of effect***

- 6 (1) In this Act, unless the context otherwise requires, **effect** includes—
- (a) any positive or adverse effect; and
  - (b) any temporary or permanent effect; and
  - (c) any past, present, or future effect; and
  - (d) any cumulative effect that arises over time or in combination with other effects; and
  - (e) any potential effect of high probability; and
  - (f) any potential effect of low probability that has a high potential impact.
- (2) Subsection (1)(a) to (d) apply regardless of the scale, intensity, duration, or frequency of the effect.

In general we support this definition, but we note that in some cases there may be potential effect of medium probability with medium or high impact that should be considered.

It may be useful to allow positive impacts as well.

#### **Clause 10: Purpose. The text of this clause is:**

- 10 1) This Act seeks to achieve a balance between the protection of the environment and economic development in relation to activities in the exclusive economic zone and on the continental shelf by—
- (a) requiring decision-makers to take the matters in section 12 into account in making decisions under sections 27, 30, and 61; and
  - (b) requiring them to take a cautious approach in decision-making if information available is uncertain or inadequate; and
  - (c) requiring the adverse effects of activities on the environment to be avoided, remedied, or mitigated.

- (2) In addition to the matters in subsection (1), this Act—
- (a) recognises that—
    - (i) some activities that are undertaken in the exclusive economic zone or on the continental shelf may have effects on the environment and on existing interests that are not addressed under other legislation; and
    - (ii) some activities are regulated under legislation in a way that incidentally avoids, remedies, or mitigates the adverse effects of those activities on the environment; and
  - (b) regulates the activities described in paragraph (a)(i) and their effects on the environment and existing interests

Re clause 10(1):

1 The **Purpose** of the Bill is highly problematic in that it gives no guidance to decision makers on how to order and rank priorities and conflicts between the protection of the environment and between the various competing activities and values.

2 The term **“balance”** is inconsistent with the international law under which New Zealand derives its authority to manage and exploit resources in the EEZ and CS.

“Balance” is also unhelpful and will generate uncertainty for all, particularly in combination with cl 12 which provides a list of competing considerations and no guidance on how to order and prioritise these. International law creates some degree of instruction on how such conflicts should be ordered, and it would be helpful if the Bill were consistent with this law.

3 The Bill protects existing activities, but not the full range of values that are associated with the EEZ and Continental Shelf. It does not even include all the values that constitute Total Economic Value as it is understood by economists.. It does not recognise and protect ecosystem integrity and functions, cultural and intrinsic values: yet these were very much part of the expression of New Zealanders’ values in the consultations conducted by the Ministerial group in the early 2000s.

The Purpose protects “existing interests” but these do not include the general public interest in biophysical processes, ecosystem functions and a healthy environment. Values widely held are not included and this is totally inadequate, since the economic interests are the only ones recognised as “existing interests”.

4 UNCLOS makes the right to exploit resources explicitly subject to the protection and preservation of the marine environment (Art 193 is subject to Art 192) but this is not reflected in the Bill. We recommend that the Bill be redrafted to achieve such compliance with UNCLOS and with other requirements of international law.

ECO recommends that this “chapeau” of Clause 10(1) be withdrawn and that instead the language of Articles 192 and 193 of UNCLOS be used, since that provides a clear hierarchy of unqualified obligation on states to preserve and protect the marine environment (Art 192) and the qualified and conditional right to use the resources in Art 193 which is explicitly subject to the obligation to preserve and protect the marine environment. This change would make our EEZ and CS Bill compatible with and compliant with UNCLOS, but there are other aspects of international law that also need to be adopted into the Purpose and other aspects of this Bill.

UNCLOS is framework international law and important concepts and principles of international law have been incorporated into related law such as the UN Fish Stocks Agreement’s articulation of the Precautionary Principle, which is also in the UNCED agreements. See the appendix that relates to international law.

The Convention on Biodiversity lays obligations on states, making no distinction between these obligations as they relate to the Territorial Sea, the EEZ and the Continental Shelf, though our rights as a state are very different in each of these.

MARPOL relates to marine pollution and New Zealand should give effect to these elements of international law as well.

ECO has provided an appendix on the international obligations relevant to marine management in the EEZ & CS and also Principles of international Environmental Law including the Precautionary Principle. This is Appendix 1 to this submission and provides detail of the international obligations and should be read in conjunction with and part of this submission.

Elana Geddis, writing in NZLawyer, says this:

**Obligations for the protection and preservation of the marine environment**

Consideration must also be given to New Zealand’s more general international legal obligations under the Convention with respect to the protection and preservation of the marine environment.

Under Part XII of the Convention, New Zealand is subject to a general obligation to “protect and preserve the marine environment” (article 192 of the Convention). That obligation extends to the obligation to take measures to prevent pollution and to ensure that activities under New Zealand’s control or jurisdiction do not cause damage by pollution (article 194 of the Convention). These general obligations are accompanied by a specific obligation on New Zealand to prescribe and enforce laws to prevent pollution from seabed activities carried out in its EEZ or on its continental shelf, and to monitor those activities (articles 204, 208, and 214 of the Convention).

In interpreting a treaty and its obligations, other “relevant rules of international law” shall also be taken into account. That requirement, expressed in article 31(3)(c) of the 1969 *Vienna Convention on the Law of Treaties*, is recognised to be part of customary international law and therefore also forms part of the law of New Zealand (see *Zaoui v Attorney-General (No 2)* [2006] 1 NZLR

289 (SC)). In accordance with that principle, in interpreting the obligations referred to in the Bill, it will be necessary also to have regard to other related rules of international environmental law such as those laid down in the 1992 *Rio Declaration on Environment and Development*, and *Convention on Biological Diversity* – including the precautionary principle (see for example the statement by the International Court of Justice that “a precautionary approach may be relevant in the interpretation and application of the provisions of the [treaty in question]”; *Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)* 2010 ICJ Reports at 164). Those rules have the potential to provide a significant gloss to the interpretation of the central provisions of the Bill, particularly the principles set out in clause 12 and the approach in the event of uncertainty provided for in clause 13.

Geddis, Elana *NZLawyer magazine*, issue 174, 2 December 2011

### **Clause 10(1)(b) & (c)**

10(1)(b) This is an unhelpfully cut down and highly ambiguous version of the precautionary principle but it is so modified as to be inconsistent with international law and very ambiguous.

The language of cl 10 does not properly express the international obligations in many international obligations and agreements, whether these are treaty law or customary law. For instance there is now an obligation in international law to take a precautionary approach with the object of precaution being the protection of the environment. This is not captured by the language of the Bill. For instance in cl 10(1)b and c:

- 10“(b) requiring them to take a cautious approach in decision-making if information available is uncertain or inadequate; and
- (c) requiring the adverse effects of activities on the environment to be avoided, remedied, or mitigated.”

The term used is “cautious” not **precautionary**, and the object of that caution is not firmly tied to the environment – replicating difficulties with the Fisheries Act and evading the true intent of the Precautionary Principle which is now a requirement of international law. A good example is that in the UN Fish Stocks Agreement, another is Principle 15 of the Rio Declaration on Environment and Development. The latter states:

*In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.*



The precautionary approach, measures or principles have been applied to a wide range of environmental situations and law including:

- protection of the ozone layer;
- response to potential climate change;
- trade in hazardous waste;
- dumping of sewage sludge;
- dumping at sea;
- fisheries sustainability;
- general environmental principle;
- management of hazardous substances;
- control on imports of new organisms;
- control of genetically modified organisms.

Apart from widespread reference in fisheries agreements, the treaties and agreements recognizing or incorporating the precautionary principle is included in the 1985 Vienna Ozone Convention, 1987 Montreal Ozone Protocol, 1989 South Pacific Driftnet Convention, 1991 Bamako Hazardous Waste Movement Convention, the 1992 Framework Convention on Climate Change, the 1996 Cetacean Conservation Agreement, the 1997 Kyoto Protocol on Climate Change, and the 2000 Seabed Mining Regulations.

As Hewison (1993) put it: *“the core elements of the precautionary principle are a recognition of:*

- 1) *the vulnerability of the environment and the scarcity of resources;*
- 2) *the limited ability of science to accurately predict threats to the environment;*
- 3) *the need to set conservative evidentiary thresholds;*
- 4) *the requirement to reverse the burden of proof away from those opposing an activity onto those seeking to promote an activity; and*
- 5) *the use of impact assessment.”*<sup>1</sup>

The Bill’s version of the precautionary approach fails to require pre-caution, and it also fails to tie the object of precaution back to the protection of the environment. A similarly attenuated version is in s10 of the Fisheries Act and this has left New Zealand in a state of chronic ambiguity and uncertainty – and has allowed fisheries management to continue to be much less than precautionary, so we have lost much natural capital, and with it, many economic benefits.

CI 10 in total: The problems embedded by the use of the tem “balance” and the lack of explicit environmental purpose of caution are further complicated by the lack of any language to guide decision makers as to how to resolve tensions between the provisions of clause 12, so that the environment can be sacrificed to economic and particularly extractive goals.

For these reasons the Bill should be amended to:

- be clear that the decision-maker must apply a precautionary approach to protect the environment;

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<sup>1</sup> Hewison G J (1993) The Precautionary Principle and its application to the management of straddling stocks and highly migratory fish stocks. July 1993. 21p.

- be clear that the burden of proof is on those exploiting the environment *must demonstrate their proposed activity has no ecologically significant long-term changes;*
- *Ensure the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures;*
- *Ensure measures are revised regularly in the light of new information;*
- *Consider the needs of future generations and avoid changes that are not potentially reversible.*

### **Clause 11**

Clause 11 on International Obligations is too restrictive, in concert with the Interpretation Clause. There are a range of international obligations in relation to the EEZ and Continental Shelf, which should also apply. UNCLOS is undoubtedly essential but there are others. New Zealand must act in good faith in relation to international law, and recognise all that applies in cl 11.

### **Clause 12**

Clause 12 is a crucial clause that needs to be better drafted to provide decision makers with a much clearer idea of what should take priority and what should constrain choices – otherwise policy decisions will be unstable, inconsistent and generate uncertainty to all, and irreversible damage to the environment may result.

Clause 12 is made even more difficult to administer by the requirement to take into account the other marine management regimes. There is an extensive list of such and many are inadequate at controlling the environmental impacts and conflicts with other values and activities.

This clause is as follows:

### ***12 Matters to be taken into account to achieve purpose***

- In making decisions for the purposes of this Act, all persons performing functions and duties or exercising powers under it that may affect the environment or existing interests must take into account the following matters:
  - (a) the adverse effects on the environment of all activities undertaken in an area of the exclusive economic zone or the continental shelf, including the effects of activities not regulated under this Act:
  - (b) the economic well-being of New Zealand:
  - (c) the efficient use and development of natural resources:
  - (d) the effects of activities on existing interests:
  - (e) the effects on human health that may arise from adverse effects on the environment:
  - (f) the nature and effect of other marine management regimes:
  - (g) the protection of the biological diversity and integrity of marine species, ecosystems, and processes:

- (h) the protection of rare and vulnerable ecosystems and the habitats of threatened species

ECO recommends that this clause be restructured to provide that protection of the environment is a binding constraint, and that values as well as activities be considered. Thus subclauses a, e, g and h should constitute higher order and binding considerations within which the other objectives are pursued.

Economic and other activities and values should be conducted within the limits of the need to maintain healthy biophysical processes and ecosystems, and ecosystem processes.

Human well being rather than economic growth as such should be pursued, since economic growth badly done can damage human well being by causing harms to other aspects of the economy (eg the Resource Curse), to society, culture, and to other values, including highly valued non-market values that are highly prized and contribute to human well being.

Subclause h is too limiting – This should impose an obligation to consider all ecosystems and species, and to vulnerable marine ecosystems, following the UN General Assembly language, and to provide particular protection to vulnerable or rare ecosystems, rather than requiring both qualities to apply. Similarly, it should not be only the habitats of threatened species that are considered but the species themselves and this consideration must be in stronger terms than simply to consider these.

### **Clause 13**

**The Information Principles** have some helpful elements in them, but they also present some difficulties. The language of this clause is as follows:

#### ***Information principles***

- 13 1) In achieving the purpose of this Act, a person performing functions and duties or exercising powers under it that affect the environment must—
  - (a) make full use of the information and other resources available to it and of its powers to obtain information and expert advice and commission research; and
  - (b) base decisions on the best available information; and
  - (c) take into account any uncertainty or inadequacy in the information available.
- (2) If, in relation to the making of a decision under this Act that affects the environment, the information available is uncertain or inadequate, the person must favour caution and environmental protection.
 

[ECO Comment: this does have the element of reference to environmental protection, but the caution should be tied down as having environmental protection as its objective.]
- (3) If favouring caution and environmental protection means that an activity is likely to be a prohibited activity or a marine consent is likely to be refused, the person must first consider whether taking an adaptive management approach would allow the activity to be undertaken.

(4) In this section, **best available information** means the best information that, in the particular circumstances, is available without unreasonable cost, effort, or time.

This clause 13 needs a bit more work in that:

a) the reference **to a person performing functions and duties or exercising powers under it that affect the environment** does not provide clarity in that approval of consents for instance may lead to impacts on the environment, but does not of itself affect the environment. This clause needs to have language that relates to “may lead to effects on the environment” or some such.

Subclause 13(3) seems to invite allowing risky activities that amount to “suck it and see” and will put the environment at jeopardy.

a) ECO considers that there are a number of problems with the clauses in Subpart 3 that define Duties and Restrictions, particularly clauses 15-18.

Some activities should be prohibited, whether or not these are existing activities, since they are too damaging to be allowed. The UNGA has for instance pinpointed certain methods of fishing as so damaging that there must be controls on them particularly to avoid impacts on vulnerable marine ecosystems and that prior Environmental Impact Assessments must be done.

There are misconceptions that some activities that are permitted have exclusive rights. Examples are the fisheries quota holdings that were never previously understood to be more than a right to hunt – they were never exclusive area rights and should not be treated as such.

ECO agrees that some activities should be prohibited, but we also understand that others should be allowed in some places but not in others.

Subject to changes to clause 10 and 12 along the lines we suggest, we consider that fishing should be covered by this Bill.

## **Clause 14 Treaty of Waitangi**

In order to recognise the Crown's responsibility to take appropriate account of the Treaty of Waitangi,—

The term “appropriate account” is vague and ambiguous. We would like to see this ambiguity removed. For instance, the geographic scope, the degree of power of the instruction (ie “give effect to”, “take account”, provide for” etc) needs to be spelt out and considered in the light of the Wai262 report.

### **Clause 19**

We welcome the **clause 19 Duties of Persons**, etc, but consider that subclause 19(2) should be omitted since this seems to remove the force of the obligations referred to and any incentive to comply.

### **Clause 17 Existing Activities**

This seems not to preserve the environment or other values – it is probably unwise to continue all existing activities since many may be damaging.

Subclause 17(3) appears to invite endless wrangling to preserve pre-regulation entitlements.

### **Part 2, Clause 27 and following- Requirements and Consents :**

ECO supports the notion of spatial management and controls, but these need to be determined with public processes for input and expression of values as well as evidence, and we understand that some of the EPA processes have not been particularly responsive to the expression by the public of environmental and cultural and ethical values. We would like to see clear, publicly accessible and friendly processes for such.

Cl 27(1)(b) seems to need the words “assessing and controlling” or some other verb to do with effects – this seems to be a drafting error.

Cl 27(2) b should also provide for methods for classifying the environment and effects.

### **Clause 28 Regulations classifying areas**

1(a) The UN Resolution on damaging effects of deep water fishing refers to “Vulnerable Marine Ecosystems”, known as VMEs. We cannot see why this language of “especially” vulnerable has been used. We recommend the word “especially” be deleted.

1(b) Regulations should also identify and provide for areas that are important habitat, have special historic or conservation value, not just “important for specific uses.

### **Clause 29 Regulations classifying activities**

This clause needs to be modified to protect existing values and qualities.

### **Clause 32 – Process for Developing or amending regulations [and Standards]**

We support this clause but consider it needs to require consultation on the specifics of regulations and standards, not simply the subject matter of such.

### **Clause 33 – Matters to be considered for regulation**

In our view this section is weak as regards the environment. As noted above, “balance” is very weak, and the requirement to “have regard to” is also weak. Once again, the need to protect the environment is not given the priority that UNCLOS and other international law demands.

It is not clear to us how the differing regulatory rights that NZ has in relation to the EEZ and the Continental Shelf are to be managed here.

What about overlap areas with the RMA?

**Clause 34 – Relationship between regulations and prohibitions, etc**

Generally this seems sensible, but the lack of prioritisation and ranking means that this clause could imply that, for instance, closures of marine areas to fishing would not be permitted. That would seem to be of particular concern.

It is not clear to us

**Clauses 36-38. Types of Activity –**

It seems to us that there would be merit in some greater set of categories so that investors and others are given greater guidance as to the acceptability of activities. These ought also to be able to be varied according to the spatial or ecosystem basis and location, rather than being simply national.

Both Strategic Environmental Assessments and Alternatives assessments should be provided for. Throughout these should be open to public input and publication.

**Clauses 39, 40 Application for Marine Consents; Impact Assessments, Submissions and Hearings**

We welcome aspects of these provisions but consider changes need to be made to some aspects, as follows:

39(2) Impact Assessments – Those whose values not just interests should be identified and consulted.

**Clause 40 Impact Assessment**

40(3) ECO would like to see information sufficiency conditions for Impact Assessments and that this should go beyond simply making a “reasonable effort”, since it is the information not the effort that counts.

The text of clause 40 does not seem to include consideration of alternatives to the activity proposed, just alternative means and locations of the activity. It is fundamental to modern Impact Assessment methodology that alternatives to undertaking the activity be considered. It is essential that such is included in this definition.

As such, we propose cl 40(g) be re-written to be:

“40(g) Specify **any possible alternatives to the proposed activity**, alternative locations for or methods for undertaking, the activity...”

Those with values or interests in the protection of the environment should be consulted and be part of the EIA process.

**Clause 42 Return of Incomplete Applications**

The requirement that the EPA must review an Impact Assessment and decide whether it is complete or not within 10 days is patently absurd, and will prejudice good

decision making. Often specialists need to review such documents which may have taken months to prepare. Ten days may not be enough to find and hire such specialists, let alone to review for completeness. An applicant has all the time in the world, the regulator will be severely compromised and the environment harmed by such a provision.

ECO submits that 30 working days is a much more reasonable time for such a review of completeness.

**Clause 45 – the EPA may obtain Independent Advice.**

45(4) We do not agree that the applicant should be permitted to object to the obtaining by the EPA of independent advice.

The Parliamentary Commissioner for the Environment has the function of undertaking audits of EIA under the Environment Act 1987, so this should be included here and the PCE should have a function in auditing the process from time to time – ie not for each application processed.

**Clause 46 – Public Notice.** We recommend that as well as this provision, there be established a system by which parties can ask to be notified of processes (eg spatial planning) and consent applications by electronic means as a matter of course rather than having to rely solely on web site surfing and newspaper advertisements. These days it would be simple enough to allow those interested to subscribe to email lists and these should be maintained to help those interested keep up with the work of the EPA and consents, EIAs, etc. We would like applications to be publicly notified so that the public can also have input into the question of whether the application and EIA is complete.

We would like to see a similar process of opt-in notification apply to all planning and other processes as well as particular consents.

**Clause 48 Time Limit for Submissions:**

**Twenty working days after the notification of an application for submissions is far too short and is quite unreasonable.** Applicants may have developed their application over extended time periods, drawing on a range of specialists. Submitters will need to find and hire and deploy their own specialists, who may need time to report or sample, and this process cannot reasonably be compressed into 20 working days after the notification of the application. That is very unfair to submitters and amounts to loading the dice in favour of the applicant.

The time period for submissions is inadequate given the extensive information needs that may be required to deal with major projects and to secure expert advice. There will not be the same available pool of experts for EEZ and Continental Shelf activities as there are say, with the RMA, and even with the RMA some expertise is very hard to come by.

**Access to Expertise**

Thought needs to be given to how expertise will be available to all parties, and in particular how the information and experts in NIWA and GNS can be made available to the whole New Zealand community and not be captured by applicants with

commercial arrangements with the CRIs. This is an acute problem, made much more acute by the Ministry of Science and Innovation's stance of engaging with and tailoring their activities and research to the interests of industry while excluding and ignoring civil society and NGOs, as demonstrated by the MSI Statement of Intent and its failure or refusal to consult with vitally interested members of environmentally minded civil society and NGOs with an established interest in matters.

In essence, this is part of a deeper problem of the capture of public research bodies for private purposes.

### **Clause 53 Public Hearings**

We have some misgivings on the extent of the powers given to the EPA to limit submissions. We think this set of provisions needs further scrutiny to avoid losses of the rights of submitters.

### **Clause 59 EPA Decisions**

ECO strongly opposes the subclause 59(6) that disallows consideration of "the effects on climate change of discharging greenhouse gases into the air" since the (faulty) rationale for the equivalent provision of the RMA does not apply here, since the ETS does not apply to exported GHGs but these are of major concern in relation to the climate and the integrity of our planet's systems. It is reprehensible to exclude consideration of GHG emissions and will damage NZ's reputation and the environment. There is no social consent for this provision which seems to be designed simply for the benefit of fossil fuel and mining interests.

Cl 59(4)(c) It is unclear why there is an implicit restriction in this clause on the consideration of matters such as impacts on biodiversity, air, the cryosphere or hydrothermal systems, and geological structures beyond the EEZ – it is not just water that is beyond the EEZ. UNCLOS requires the preservation and protection of the marine environment, but other law requires consideration of transboundary environmental effects, not simply the marine environment.

### **Clause 61 Decisions on applications**

Clause 61 seems to make the decision making even more complicated, yet also seems to sweep aside the many considerations in clauses 10 and 12 and others: Cl 61(2) simply sweeps the decision into a crude cost benefit analysis of adverse environmental effects v contribution to NZ's economic development.

Either part of this calculus may be much debated, but it is entirely unclear why such a crude test is suddenly imposed when so many considerations were outlined in earlier sections. We agree with the Parliamentary Commissioner for the Environment that subclause 61(2) is ill conceived and may be a drafting error. It should be withdrawn.

Cl 61(4) (b) This too is a short cut clause that essentially sweeps away the precautionary approach and allows a "suck it and see" approach which is incompatible with responsible environmental management. We recommend that this subclause be removed.



## **Cl 62 Conditions of Marine Consents**

This section is much too restrictive. Liability rules should be allowed, not simply liability insurance requirements. **Public** disclosure and reporting should also be included in this list.

**Clause 62(3)** This subclause seems very unclear and possibly contrary to its intent. We do not agree that the EPA should be disbarred from imposing a condition to control an effect just because some other law allows a similar effect. Are we to maintain all the on-going harms for instance from dredging because bottom trawling may have similar effects? Two harms to do not make a right. We submit that this clause be re-examined and removed.

What happens to the conditions on marine consents if these are then surrendered? We are aware that this has been a problem in some situations where conditions are voided by the surrender of a consent. Clause 63 on Bonds has a section that preserves bond requirements, but there seems to be nothing in clause 62 to preserve conditions of the consent. This is bound to cause trouble and needs to be attended to so that conditions can be maintained even if a consent holder wants to relinquish the consent.

## **Clause 63 Bonds**

In general we support this clause, but we are not totally persuaded that bonds should only apply for long term effects. What about severe short term effects?

## **Clause 65 Observers**

In our view the appointment of Observers should be by the Crown or some independent authority and that such people should not be appointed by or directly paid by the consent holder. Experience within the fishing industry has shown that industry appointed observers report far fewer interactions with marine mammals than do government observers, so such influences as who appoints and pays clearly affects the performance of the observers.

**Clause 65(3)** We oppose this requirement on the EPA to approve observers with certain qualifications, since this pays no attention to bias and other attitudinal problems.

## **Clause 66 Time Limits for EPA decisions**

Twenty working days is too short for complex decisions to be framed and reported. We suggest at least 30 working days.

## **Clause 70 Real or Personal Property??**

This clause is at best opaque, and needs to be more clearly stated and explained since it appears to be self contradictory, complex and obscure.

## **Clause 71 Duration of Marine Consent**

The duration of consents of 35 years is too long. Technologies and environmental conditions, as well as values may change hugely over this period. Few investments have such a long time frame and this is excessive. It puts too much risk on the environment.

#### **Clause 74 EPA Review of Consent duration and conditions**

Because an effect may be anticipated, but the duration, spread, or intensity of the effect may not have been, We suggest that Clause 74 be modified by adding the words to cl 74(c), the words “or if the extent, intensity and duration of the effects were not anticipated by the EPA when the consent was given”.

#### **Clause 76 Notice of Review**

We support the requirement to publicly notify any intention to review conditions.

Clause 77(2) We oppose the provision that clause 45(1)(a), the commissioning of independent reviewers, may not apply to a review of conditions and so on.

#### **Clause 79 Decisions on Review of Consent Conditions**

ECO supports the power to cancel a marine consent (Clause 79(3 and 4) if environmental harm results, but we consider that there should as well be power to cancel such if insufficient economic gain accrues to New Zealanders or if cultural offence results.

#### **Clause 80 Decision on Review of Duration of Consent**

Consistent with points made earlier, we consider that if effects were anticipated, but the spread, intensity, significance or duration of the effects is greater than anticipated, then reduction of the duration of the Consent should be permitted. Clause 80 should be amended accordingly.

#### **Clause 81 Process for Minor Changes**

ECO is very concerned that this provision may provide an incentive to declare minor what are in fact considerable effects, simply because neither the Authority nor the applicant wants a public process. We thus consider that any intent to declare a change minor should be publicly notified and that designation should be able to be challenged.

#### **Clause 85 (5) Change or Cancellation of consent conditions on application or a consent holder.**

We cannot agree with Cl 85(5) that the EPA need not publicly notify either the request re conditions or the decisions. We urge that this be removed.

#### **Subpart 3 – Consents for cross boundary activities.**

ECO is unclear whether the consenting authorities referred to here include DoC. We oppose DoC being forced to combine processing and the EPA running it if it does include DoC.

We have become lost in all the cross referencing and section references in this section of the Bill.

#### **Clause 99 Rights of Objection**

This set of provisions seems loaded against submitters who appear to be disbarred from objecting to many of the matters that the applicants have rights to object to. We cannot accept such uneven treatment. Compare the provisions in 99(1) and (3) with those of 99(2) to see the difference yet submitters should in fairness be empowered to object or appeal on most of the matters in Cl 99 (1) and (3).

**Clause 103 Appeals on Questions of Law**

ECO considers appeals on substance should also be allowed.

**Clause 122 Restrictions on applications for enforcement orders.**

ECO is unclear why these restrictions are provided for, particularly that in clause 122 (1) (d) in the light of the Rena disaster, and suggests that this be reconsidered.

**Clause 125 Penalties**

The penalties provided for are too light for major corporate pursuing mining or oil or various other projects.

Imprisonment must be provided for to provide humans with genuine personal incentives to take care of the environment. We submit that penalties of imprisonment be added to the Penalties in Cl 125.

**Clause 126 Strict Liability and Defences**

It is ECO's submission that the defences are too liberal. Most particularly, mechanical failure should be removed from Cl 126(2)(b) since maintenance, design for failsafe or alarms or other such should always be incentivised and this does the opposite.

**Clause 127 Liability of Principal**

ECO supports this provision.

**Clause 128 Limitation of Proceedings**

The limitation of Proceedings provision is too short. 6 months is much too short – we recommend that 3 years be the minimum.

**Clause 129 Enforcement Officers**

The eligibility criteria should also include DoC officers, Maritime NZ staff, Fisheries Officers and certain Defence staff, Police. Such should also be protected under Clause 133.

**Clause 134 Cost Recovery**

ECO's experience of cost recovery in Fisheries is that this has become a potent method of industry capture of regulators. We do not recommend reliance on cost recovery, but rather an appropriation from Parliament and then levies on resources exploited to pay for management.

**Clause 146 Protection of Sensitive Information**

In ECO's view the proviso in Cl 146(1)(b) is vital.

**Clause 148 Requirements for Waivers and extensions**

We have made a number of comments about the excessively compressed time periods, and we suggest that the time periods be relaxed somewhat given the specialist information and expert needs in the marine areas beyond the territorial sea, and that often, submitters are ordinary members of the community who often can only work on the issues in the evenings and weekends.

ECO appreciates the opportunity to participate in the review of the Bill and wishes the Select Committee well in its work on it. We wish to be heard in support of this submission. Please contact ECO at [eco@eco.org.nz](mailto:eco@eco.org.nz) tel 04385-7545 and copy in [ecowatch@paradise.net.nz](mailto:ecowatch@paradise.net.nz) and [Cath.Wallace@paradise.net.nz](mailto:Cath.Wallace@paradise.net.nz) for any arrangements about this submission.

Sincerely,

Cath Wallace, Barry Weeber, co-chairs of ECO for the ECO marine group and the Executive committee.

#### **Appendix 1: INTERNATIONAL LAW CONSIDERATIONS & THE LAW AND MANAGEMENT OF THE EEZ & CONTINENTAL SHELF.**

**Derived from a paper by Barry Weeber.**

New Zealand has a range of international obligations that are relevant to marine management. The UN Convention on the Law of the Sea (UNCLOS) and the Biodiversity Convention are the two key pieces of international law that deal with the marine environment, and MARPOL is a key element in relation to marine pollution.

The *United Nations Convention on the Law of the Sea* (UNCLOS) was signed in 1982 but did not come into force internationally till 1994. New Zealand ratified the convention in 1996. The Convention is a framework regime for all marine management including fisheries, mining, marine pollution, and structures. This Convention is linked to the *Agreement Relating to the Implementation of Part XI of the UNCLOS 1994* which amended the deep sea bed mining provisions of the Treaty. The Convention has only partially been incorporated into New Zealand law. Kimball (1995) describes the environmental obligations of UNCLOS.

The *Convention on Biological Diversity* (CBD) includes a number of articles relevant to marine management including article 8 (In-situ Conservation) and article 10 (Sustainable Use of Components of Biological Diversity). This Convention has been ratified by New Zealand and came into force internationally in December 1993. This Convention has not been directly incorporated into New Zealand law but is relevant to laws which have provisions that refer to New Zealand's international obligations. These include section 5 of the Fisheries Act and section 6 (f) of the Hazardous Substances and New Organisms Act 1996. The Department of Conservation is the lead agency for the CBD and is jointly developing a national biodiversity strategy with the Ministry for the Environment. Glowka et al (1994) describe the provisions and obligations of the convention.

There are a range of other important pieces of maritime international law or agreements. Listed below are some of the main international agreements related to the marine environment.

The first is the *UN Agreement for the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*. The provisions of Part II (Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks) and Annex II (Guidelines for the Application of Precautionary Reference Points in Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks) are relevant to all fisheries management. It also includes provisions to conserve non-fish species including seabirds. New Zealand has signed the agreement but not ratified it.

The *Rio Declaration 1992* and *Agenda 21* (particularly chapter 17) are relevant. New Zealand signed these provisions which while initially not legally binding, are developing into customary international law. For example the Rio Declaration principle 15 on the precautionary approach has become widely accepted.

The *FAO International Code of Conduct for Responsible Fisheries 1995* includes objectives and general principles of fisheries management; data gathering and management; the precautionary approach; and fisheries research. New Zealand has not formally adopted this code but it represents an internationally accepted standard that is relevant to the implementation of UNCLOS.

The *International Convention for the Prevention of Pollution from Ships (MARPOL) 1973* and the 1978 Protocol (known as the marine pollution convention) has six annexes which deal with: oil; noxious liquid substances in bulk; harmful substances in packages; sewage from ships; garbage from ships; and air pollution. Annexes I, II and V encourage countries to identify “special areas” where greater controls are applied (Van Dyke 1993). New Zealand is in the process of ratifying this Convention which should be completed by late 1998.

The *London Convention - International Convention on the Prevention of Marine Pollution by Dumping of Wastes, 1972* and the 1997 Protocol deals with dumping of waste at sea and incineration at sea.

The *International Convention for the Regulation of Whaling (IWC) 1946* includes measures to control the exploitation of whales.

The *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1973* controls international trade in endangered species. This Treaty is incorporated into New Zealand law by the Trade in Endangered Species Act 1989.

The *Convention on the Conservation of Migratory Species of Wild Animals* (the Bonn Convention) includes measures to conserve migratory animals including seabirds. New Zealand has not acceded to this convention but all our albatrosses are listed on the Convention’s schedules. Australia is a party to this Convention and is promoting a regional agreement on albatross conservation that could involve New Zealand.

The *Convention Concerning the Protection of the World Cultural and Natural Heritage* (the World Heritage Convention). Our Sub-Antarctic Islands, including our surrounding territorial sea, are World Heritage Sites. This Convention is not directly incorporated into New Zealand law.

The *Convention for the Protection of Natural Resources and the Environment of the South Pacific Region* (Noumea Convention) includes measures to control pollution from vessels and land-based sources, disposal of wastes and specially protected areas. This Convention applies to the NZ EEZ.

## EXAMPLES OF INTERNATIONAL OBLIGATIONS\*

|  | Signed | Ratified                           | Domestic Law   | Lead Agency                   |
|--|--------|------------------------------------|--|-------------------------------|
| ACAP, 1999   | Yes    | Yes                                | No   | DoC                           |
| Bonn Convention, 1979  | Yes    | Yes                                | No   | DoC                           |
| Convention on Biological Diversity, 1992                                   | Yes    | Yes                                | No   | DoC/MFAT                      |
| CCAMLR, 1980   | Yes    | Yes                                | Antarctic Marine Living Resources Act, 1981                        | MFAT/MAF Fish                 |
| CCSBT, 1993  | Yes    | Yes                                | Fisheries Act  | MAF Fish                      |
| Driftnet Convention, 1989  | Yes    | Yes                                | Drift Net Prohibition Act  | MAF Fish                      |
| IWC, 1946  | Yes    | Yes                                | Marine Mammals Protection Act, 1978                                | DoC/MFAT                      |
| London Convention 1972 and Protocol 1996                                   | yes    | Yes                                | Maritime Transport Act 1994  | MFAT                          |
| MARPOL, 1973 and Protocol 1978   | yes    | Nov 1998 - not Annexes IV, VI, VII | Maritime Transport Act, 1994, through rules                        | MFE/Maritime Safety Authority |
| Noumea Convention, 1982  | Yes    | Yes                                | Partial – Maritime Transport Act                                   | MFAT/DoC                      |
| Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995 | Yes    | Yes                                | Fisheries Amendment Act 1999                                       | Ministry of Fisheries         |
| RAMSAR, 1971   | Yes    | Yes                                | no – only protected from mineral activity in Crown Minerals Act 97 | DoC                           |
| World Heritage, 1972   | Yes    | Yes                                | No   | DoC                           |

|  |     |     |                           |                 |
|--|-----|-----|---------------------------|-----------------|
| UN Convention on the Law of the Sea, 1982                        | yes | Yes | Partial - UNCLOS Act 1996 | MFAT/MFish/Mo C |
| South Pacific Regional Fisheries Organisations 2009 <sup>2</sup> | yes | Yes | Fisheries Act Part 6      | MFAT/MAF Fish   |

## CONSERVATION STATUTES COVERAGE

|                               | Foreshore | Inside 12nm | EEZ                               | Extended Continental Shelf |
|-------------------------------|-----------|-------------|-----------------------------------|----------------------------|
| National Parks Act            | Yes       | no          | no                                | No                         |
| Reserves Act                  | Yes       | no          | no                                | No                         |
| Marine Reserves Act           | Yes       | yes         | No                                | No                         |
| Wildlife Act                  | Yes       | yes         | yes for seabirds & marine species | No                         |
| Marine Mammals Protection Act | Yes       | yes         | Yes <sup>3</sup>                  | Yes <sup>4</sup>           |
| Conservation Act              | Yes       | yes         | Only CMS Strategies               | No                         |

## KEY ENVIRONMENTAL STATUTES

|                         | Inside 12 nm          | Outside 12nm                   |
|-------------------------|-----------------------|--------------------------------|
| Resource Management Act | Yes                   | no                             |
| Fisheries Acts          | Yes                   | yes                            |
| Biosecurity Act         | Yes                   | only to 24nm (Contiguous zone) |
| HASNO Act               | yes                   | No                             |
| Crown Minerals Act      | Yes                   | Yes but only petroleum         |
| TSCZEEZ Act             | Yes                   | yes                            |
| Maritime Transport Act  | yes for oil pollution | yes                            |
| Continental Shelf Act   | Yes                   | Yes                            |

As Sanger (1987) acknowledged in his review of UNCLOS “*it is perhaps well to remember that the various limits that had been put forward for different reasons were all arbitrary*”. The limits are politically defined and have no relationship to ecosystem boundaries.

As Levy (1993) put it:

<sup>2</sup> Yet to come into force.

\*This may need some updating – and MFish is now MAF.

<sup>3</sup> But not for petroleum activity.

<sup>4</sup> But not for petroleum activity

*“The jurisdiction of the coastal state diminishes as distance offshore increases. The coastal state has full sovereignty over its land territory and its internal waters; it has to concede a right of innocent passage in its territorial waters; and it possesses only sovereign rights over the resources of its exclusive economic zone and its continental shelf. Finally, on the high seas, it exercises its jurisdiction and control only over ships flying its flag.”*

New Zealand’s internal water includes the West Coast harbours and estuaries, Marlborough Sounds, the Fiords and parts of the Hauraki Gulf.

State sovereignty over the territorial sea also applies to the air space as well as to its seabed and subsoil (article 2, UNCLOS). In NZ’s case, Treaty of Waitangi claims may attach to those areas.

In addition to the territorial sea, UNCLOS establishes a “contiguous zone” up to 12 nautical miles beyond the territorial sea where a coastal state can “*exercise the control necessary to:*

- (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea;*
- (b) punish infringement of the above laws and regulations committed within its territory or territorial sea.”* (article 33)

Part V of the Convention establishes the legal regime for the Exclusive Economic Zone (EEZ). Article 56 sets out the rights of the coastal state:

- (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;*
- (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:*
  - (c) the establishment and use of artificial islands, installations and structures;*
  - (ii) marine scientific research;*
  - (iii) the protection and preservation of the marine environment;*
- (c) other rights and duties provided for in this convention.*

New Zealand’s rights and duties to its EEZ are, then, more limited than to the territorial sea but this does not prevent a consistent regime or administrative structure being established to cover both.

The Convention (Part VI) also sets the limit to exclusivity over the continental shelf. The limit of the continental shelf can be up to 100 nautical miles beyond the 2500-m isobath to a limit of 350 nautical miles from the shore (article 76, UNCLOS). New Zealand has received a decision on the limits of its continental shelf from the Commission on the Limits of the Continental Shelf but the limits have yet to be finalised with our Pacific neighbours – Fiji, Tonga and French territories.



On the continental shelf New Zealand has the sovereign right of exploration and development of:

*“minerals and other non-living resources of the sea-bed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move except in constant physical contact with the sea-bed or subsoil.”* (article 77, UNCLOS).

New Zealand can also control, but not impede, the laying of cables or pipelines by other states along the continental shelf outside 12 nautical miles.

## Environmental Protection and Biodiversity

UNCLOS: *“establishes for all states the unqualified obligation to preserve and protect the entire marine environment (Article 192). Its comprehensive framework addresses many aspects of this obligation.. Also articulated are a number of principles to guide the formulation of additional international rules and standards.”* (Kimball, 1995, p17).

Kimball goes on to state that UNCLOS has: *“shaped ecosystem-based marine living resources agreements and evolving concept of marine protected areas. They support a preventative approach to marine pollution and require caution in the use of technologies and the introduction of new or alien species.”* (p17)

The Biodiversity Convention imposes wider obligations on States and does not distinguish between the territorial sea and the EEZ or continental shelf.

The Convention on Biological Diversity includes obligations to identify and monitor biological diversity (article 7) (Glowka et al 1994). Article 8 sets out the provisions for in-situ conservation - that is conservation in *“conditions where genetic resource exist within ecosystems and natural habitats...”* The obligations in this article which are relevant to marine ecosystem protection include:

- “(a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;*
- (b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity;*
- (c) Regulate or manage biological resources important for the conservation of biological diversity.. with a view to ensuring their conservation and sustainable use.*
- (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.*
- (e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas;*

- (f) *Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plants or other management strategies;*
- ...
- (l) *Where a significant adverse effect on biological diversity has been determined pursuant to article 7; regulate or manage the relevant processes and categories of activities;”*

The Convention also contains provisions relevant to the control and management of alien species. Article 8 includes an obligation on states to:

- “(h) *Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species.*”

The convention also includes requirements for sustainable use of biodiversity (article 10) and environmental impact assessment (article 14). Article 22(2) requires states when implementing this Convention to act “consistently with the rights and obligations of states under the law of the sea”. This last obligation includes all marine law not just UNCLOS. Article 22(1) affects other international agreements “where the exercise of those rights and obligations would cause serious damage or threat to biological diversity”.

The Convention has extended its consideration of the marine environment through a series of mandates, guidelines, programmes of action, and recommendation with the most recent in 2010 the Aichi Biodiversity Targets agreed at Nagoya. It also contains principles including wide consultation and public participation and the adoption of a precautionary approach.

## **History of Precautionary Approach**

The reference to precautionary measures, precautionary approach or principle has been around for over 25 years. First references occur in German and European law or resolutions. In 1980 precautionary measures were referred to in a EC Council Decision in relation to CFCs.

The concept arose from a recognition that environmental damage was being recognised many years after a supposedly safe event occurred, that scientific uncertainty always exists, and with environmental issues knowledge of damage could take years, and that there were obligations to future generations.

The Precautionary approach is contained in Principle 15 of the Rio Declaration on environment and Development.

*In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.*

The precautionary approach, measures or principles have been applied to a wide range of environmental situations and law including:

- protection of the ozone layer;
- response to potential climate change;
- trade in hazardous waste;
- dumping of sewage sludge;
- dumping at sea;
- fisheries sustainability;
- general environmental principle;
- management of hazardous substances;
- control on imports of new organisms;
- control of genetically modified organisms.

Apart from widespread reference in fisheries agreements, the treaties and agreements recognizing or incorporating the precautionary principle include the 1985 Vienna Ozone Convention, 1987 Montreal Ozone Protocol, 1989 South Pacific Driftnet Convention, 1991 Bamako Hazardous Waste Movement Convention, the 1992 Framework Convention on Climate Change, the 1996 Cetacean Conservation Agreement, the 1997 Kyoto Protocol on Climate Change, and the 2000 Seabed Mining Regulations.

As Hewison (1993) put it: “*the core elements of the precautionary principle are a recognition of:*

- 6) *the vulnerability of the environment and the scarcity of resources;*
- 7) *the limited ability of science to accurately predict threats to the environment;*
- 8) *the need to set conservative evidentiary thresholds;*
- 9) *the requirement to reserve the burden of proof away from those opposing an activity onto those seeking to promote an activity; and*
- 10) *the use of impact assessment.*”<sup>5</sup>

### 3.2 Type I vs Type II Statistical Error:

Dayton (1998)<sup>6</sup> has reported on the need for the burden of proof to be on the side of the resource exploiter. He recommended that the “*burden of proof must be applied to our marine resources so that those hoping to exploit them must demonstrate no ecologically significant long-term changes*”. This approach is consistent with precautionary management and recognises the need for environmental impact assessments prior to allowing resource exploitation or use of a product and that actions that may result in significant or irreversible harm to the environment are not undertaken or permitted.

*“The challenge to management of any wild resource is to provide a buffer for uncertainties to safeguard the future health of the population or ecosystem.”* (Dayton)

<sup>5</sup> Hewison G J (1993) The Precautionary Principle and its application to the management of straddling stocks and highly migratory fish stocks. July 1993. 21p.

<sup>6</sup> Dayton, P K (1998) Reversal of the Burden of Proof in Fisheries Management. Science, Vol 279:821-822. 6 February 1998.

Dayton compares the problem of type I and type II statistical error when assessing whether an effect has been established ie testing the null hypothesis that there is no effect. Type I error is when an effect is detected when in fact none exist. Type II error is when an effect is not detected when in fact an impact does exist.

Our concern (and Dayton's) is that current management focuses on reducing the type I error because this involves catching fewer fish or further controlling an introduction and is therefore highly visible to politicians, fishing industry, employers etc. *“Those defending the profiteering can argue endlessly over the accuracy of statistics that are virtually impossible to verify..”*

*“But ignoring type II error results in failure to recognise and avoid serious long-term damage such as the collapse of the fisheries or environmental destruction... The environmental consequences from type II error are much more serious because of the great time lags in the recovery of ecosystems or animal populations. Type I errors usually result only in short-term economic costs.”*

The precautionary approach is essential to avoiding type II error and environmental consequence in management decisions.

### **3.3 Precautionary Management in International Law**

The UN FAO Code of Conduct for Responsible Fisheries (1995) includes in its general principles:

*6.5 States ... should apply a precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking into account the best scientific evidence available. The absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment.”*

Section 7.5 of the Code sets out a precautionary approach:

*“7.5.1 States should apply the precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment. The absence of adequate scientific information should not be used as a reason for postponing or failing to take conservation and management measures.*

*7.5.2 In implementing the precautionary approach, States should take into account, inter alia, uncertainties relating to the size and productivity of the stocks, reference points, stock condition in relation to such reference points, levels and distribution of fishing mortality and the impact of fishing activities, including discards, on non-target and associated or dependent species as well as environment and socio-economic conditions.”*

An FAO technical review of precautionary management of fisheries considered the approach requires:

- a) “consideration of the needs of future generations and avoidance of changes that are not potentially reversible;
- b) prior identification of undesirable outcomes and of measures that will avoid them or correct them promptly;
- c) that any necessary corrective measures are initiated without delay, and that they should achieve their purpose promptly, on a timescale not exceeding two or three decades;
- d) that where the likely impact of resource use is uncertain, priority should be given to conserving the productive capacity of the resource;
- e) that harvesting and processing capacity should be commensurate with estimated sustainable levels of resource, and that increases in capacity should be further constrained when resource productivity is uncertain;
- f) all fishing activities must have prior management authorisation and be subject to periodic review;
- g) an established legal and institutional framework for fishery management, within which fishery management plans that implement the above point should be instituted for each fishery;
- h) appropriate placement of the burden of proof by adhering to the requirements above.” (FAO, 1995)<sup>7</sup>

The US Panel on Ecosystem based fisheries management<sup>8</sup> called for policies which include applying the precautionary approach:

*“2. Apply the precautionary approach. The precautionary approach is a key element of the United Nations Agreement for Straddling Stocks and Highly Migratory Species (United Nations 1996) and the Food and Agriculture Organization of the United Nations (FAO) Code of Conduct for Responsible Fisheries (FAO 1995).*

*All ecosystems are complex and uncertainty is unavoidable. Within uncertainty, there is always a risk of undesirable consequences on fishery resources (e.g., overfishing) and/or on ecosystems. The precautionary approach was motivated by the widely accepted conclusion of scientists and fishery managers that many of the current problems of fisheries (i.e., a large number of overfished stocks) have been caused by the practice of making risk-prone fishery management decisions (i.e., to err toward overfishing) in the face of uncertainty (Garcia and Newton 1994). One approach to coping with uncertainty, which is widely applied to other human endeavors, is to encourage behaviors (often by enacting regulations) that reduce risk. Thus, the precautionary approach calls for risk averse decisions (i.e., to err toward conservation). FAO (1995) provides guidelines on the application of the precautionary approach.*

The Implementing Agreement on High Seas Fisheries and Straddling Stocks includes in it general the requirement to “*apply the precautionary approach in accordance with article 6*”... “*in order to conserve and manage straddling fish stocks and highly migratory fish stocks*”...

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<sup>7</sup> FAO (1995) Precautionary Approach to Fisheries: Part 1 Guidelines on the Precautionary Approach to Capture Fisheries and Species Introductions. June 1995. 30p.

<sup>8</sup> Ecosystem Principles Advisory Panel (1999) Ecosystem-base fishery management. Report to Congress. National Marine Fisheries Service. 54p.

Article 6 requires states “*shall apply the precautionary approach widely to conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks in order to protect the living marine resources and preserve the marine environment.*”

2. *States shall be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.*
3. *In implementing the precautionary approach, States shall:*
  - (a) *improve decision-making for fishery resource conservation and management by obtaining and sharing the best scientific information available and implementing improved techniques for dealing with risk and uncertainty;*
  - (b) *apply the guidelines set out in Annex II and determine, on the basis of the best scientific information available, stock-specific reference points and the action to be taken if they are exceeded;*
  - (c) *take into account, inter alia, uncertainties relating to the size and productivity of the stocks, reference points, stock condition in relation to such reference points, levels and distribution of fishing mortality and the impact of fishing activities on non-target and associated or dependent species, as well as existing and predicted oceanic, environmental and socioeconomic conditions; and*
  - (d) *develop data collection and research programmes to assess the impact of fishing on non-target and associated or dependent species and their environment, and adopt plans which are necessary to ensure the conservation of such species and to protect habitats of special concern.*
4. *States shall take measures to ensure that, when reference points are approached, they will not be exceeded. In the event that they are exceeded, States shall, without delay, take the action determined under paragraph 3 (b) to restore the stocks.*
5. *Where the status of target stocks or non-target or associated or dependent species is of concern, States shall subject such stocks and species to enhanced monitoring in order to review their status and the efficacy of conservation and management measures. They shall revise those measures regularly in the light of new information.*

The provision also requires States to be cautious when managing new and exploratory fisheries.

### **3.4 New Zealand Law**

A restricted and limited form of precautionary management exists in section 7 of the Hazardous Substances and New Organisms Act and section 10 of the Fisheries Act 1996 but neither capture all the concepts included in international law.

#### 4.0 Proposed Changes

For these reasons the Bill should be amended to:

- be clear that the decision-maker must apply a precautionary approach to protect the environment and to limit environmental harm;
- be clear that the burden of proof is on those exploiting the environment *must demonstrate their proposed activity has no ecologically significant long-term changes;*
- *Ensure the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures;*
- *Ensure measures are revised regularly in the light of new information;*
- *Consider the needs of future generations and avoid changes that are not potentially reversible.*